International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Technological Readiness and Training Development as Predictors of Work Performance among Credit Cooperatives in Mati City

Melchie L. Masumpad[1], Dr. Catharine G. Caballero[2]

[1]Teacher III, Lupon National Comprehensive High School, Department of Education
melchie.masumpad@deped.gov.ph
[2]Associate Professor II, Faculty of Business and Management , Davao Oriental State University
catharine.caballero@dorsu.edu.ph
https://orcid.org/0000-0002-8192-9705

Abstract
This study looked into the influence of technological readiness and training development on the work performance among Credit Cooperatives in Davao Oriental, Philippines. Quantitative research design using multiple regression analysis was employed in the study. A Survey questionnaire was administered to the 100 personnel from credit cooperatives in District 2 of Davao Oriental, Philippines using total population sampling method. Findings show that the overall level of technological readiness of employees, training and development, and work performance all obtained a very high descriptive level. On the other hand, both the technological readiness and training development have significant influence with work performance. However, of the two independent variables, training development emerged as the strongest predictor of work performance.

Keywords: Technological Readiness, Training Development, Work Performance, Credit Cooperatives, Davao Oriental, Philippines

1. INTRODUCTION

Work performance is, indeed, critical for organizational success. It is the core of productivity, influences service quality, and determines organizational competitiveness in the market. However, all organizations face difficulties with sustaining their employees' work performance due to rapid development of new technologies and ever-changing working conditions (Kulkarni et al., 2024). The problem is also supported by statistics that show decreasing work performance among individuals recently. In particular, there has been observed low efficiency of employees, increased number of errors in performance, and poor quality of work completed by staff members. There are numerous factors that contribute to this; there is increased pressure to perform, lack of continuous skills training, non-prepared individuals to adopt new technologies, unclear job descriptions, and low employee motivation at work among others (Ogbodoakum et al., 2022). With the adoption of new technologies becoming necessary simply for companies to survive,

it is only right that these workers possess both the readiness to embrace and the capability to utilize these technologies.

The influence of effective organizational support and personal skills cannot be overlooked in terms of increasing efficiency of employees. According to Hossain et al. (2025), the efficiency of employees can be increased through creating positive working conditions, support from managers, and constant training. The lack of training leads to stress and reduces efficiency because an employee does not know how to use the new technology properly. As was noted by Karim (2025), performance decreases as a result of switching companies to digitization because the majority of individuals were not ready for all these changes, get confused, and the process of communicating turns into chaos. Consequently, implementing technology could lead to negative results if you do not put effort into preparing your team.

On a global scale, research has always indicated the significant impact of individual capability along with organizational factors on work performance. As stated by Hossain et al. (2025), performance at work can be affected highly by factors such as work environment, manager support, and availability of training. If employees do not receive adequate training or are unable to cope up with emerging technologies, it leads to higher stress levels, which eventually results in decreased efficiency and performance. Furthermore, according to Karim (2025), organizations undergoing transformation into digital systems may have performance problems related to poor communication, unclear roles, and lack of preparedness for the system change among others.

Taking all this into consideration, it becomes clear that the work performance issue in the Philippines is becoming obvious as organizations are forced to comply with the digital developments on a global scale despite being constrained on the local level. The Rhiannon organizations, especially small firms and cooperatives, face challenges like lack of contemporary equipment, proper training materials, and different levels of technological preparedness among employees. As de Larmelina et al. noted, work performance is an important aspect of business excellence (2025) in Philippine organizations, as it influences their productivity and effectiveness of service delivery to the customers. Poorly equipped with essential skills and technologies, employees cannot show required results at work especially when the use of digital systems is becoming commonplace.

In addition, employee engagement and satisfaction have been highlighted as critical elements that are strongly linked to performance in the workplace. According to Rahim et al. (2022), when an organization recognizes its employees and promotes good communication, and develops its employees, they become motivated, proactive, and excellent performers. Conversely, organizations that fail to develop their employees and prepare them technologically suffer poor performance, resistance to change, and lack flexibility (Tunmibi, 2024). This demonstrates the importance of aligning training programs with technology requirements in order to achieve improved employee work performance. With all these, training and development have now become an essential aspect for organizations in improving work performance. This especially applies in the current organization environments where there is always changing technology. Organizations are slowly coming to understand that the performance of employees is significantly influenced by the quality of training that they receive. According to Khaouam Et al. (2025), training programs are vital in ensuring that employees acquire knowledge and skills necessary for them to execute their job functions flawlessly. In addition to this, Hunja (2024) indicated that training helps in effective decision-making, reduces work mistakes, and assists in developing a productive workforce. However, training might not be enough if employees are not willing to utilize the skills they acquire due to the high level of digitalization in organizations.

Despite the many ongoing research activities within rural organizations, it is clear that there is still much work left to be done regarding this issue. On the other hand, very little work has been done on this topic so far. Most of it is aimed at analyzing large companies or organizations working in urban settings where the specific issues and the resource constraints faced by cooperatives could not be accurately addressed. Credit cooperatives are financial institutions dependent on the efficiency, accuracy, and quality of services rendered by their employees. Thus, they require a well-prepared staff and technological equipment. It is evident that there is definitely a need for further research regarding this issue due to the absence of empirical information about the subject matter. An insight into the impact of technological preparedness and training development on performance will enable cooperators to make better use of the resources at their disposal and ultimately survive in a digital financial world.

Objectives of the Study

This study aimed to determine the influence of technological readiness and training development on the work performance among credit cooperatives in Davao Oriental. Specifically, it sought:

1. To determine the level of technological readiness of employees in terms of:

1.1 equipment capability;
1.2 technology skill;
1.3 self-direct learning; and,
1.4 motivation.

2. To determine the level of training development of employees in terms of:

2.1 Training Needs Assessment;
2.2 Program Design;
2.3 Effectiveness; and,
2.4 Development Implementation.

3. To determine the level of work performance of employees in terms of:

3.1 Task Performance;
3.2 Contextual Performance; and,
3.3 Counterproductive Work Behavior.

4. To determine if technological readiness and training development significantly influence employee performance.

Hypothesis

The hypothesis was tested at 0.05 significance level.

1. Technological readiness and training development do not significantly influence employee performance.

2. LITERATURE REVIEW

Technological Readiness

Technological readiness may be viewed as the state in which the individual is willing and able to use technology at work (Otache et al., 2023). This includes not only the individual's attitudes and beliefs but also his/her capabilities with regard to the technology and organizational assistance with the adoption of that particular technology. Technological readiness plays a vital role among employees in credit cooperatives who facilitate digital transactions and record keeping, as well as communicating efficiently with customers through technology. Employees that are technologically ready have high proficiency in using software, adapting to system change, and working efficiently (Mweu & Mose, 2024). The four (4)

aspects of technological readiness include equipment capability, technology skill, self-directed learning, and motivation.

Equipment capability is an aspect of technology where one evaluates the degree of availability of technological resources by the employees, such that these resources should be sufficient and operational to enable efficient execution of tasks (Oliveira et al., 2024). For credit cooperative staff, equipment is comprised of computers, software, digital communication means, and networking tools. The presence of sufficient equipment enables effective processing of transaction processes, efficient communication with customers, and record keeping. Studies indicate that companies with modern technological resources tend to have highly efficient employees with high-quality services due to low error incidences (Wahyuningtyas et al., 2023). As Koech and Gatobu (2024) assert, the equipment capability will have direct impact on the productivity of employees operating within financial organizations. The two scholars further indicate that adequately equipped cooperative organizations are capable of avoiding any form of delay hence satisfying their members. Secondly, the level of equipment is another key factor in determining the willingness of the employees to embrace innovations. According to Kirschirchir (2024), equipment capability is another important determinant of innovation adoption among employees in cooperative organizations since employees require the necessary equipment for efficient skill application. Nevertheless, lack of adequate equipment might frustrate the employees leading to ineffective performance.

Technological skill refers to an employee's ability to use digital tools, software, and technology systems that are required for performing their job functions (Kulkarni et al., 2024). For instance, in the context of credit cooperatives, it entails proficiency with accounting systems, member management software, and transaction platforms online. Employees with strong technological skills can perform tasks more quickly, avoid mistakes, and easily adapt to system upgrades (Azhar et al., 2025). According to research, technological skill is positively correlated with task performance and adaptive performance in technology-related workplaces (Mohammad et al., 2025). For cooperative employees, these skills enable efficient management of member information, accurate record keeping of financial transactions, and effective internal and external communication. Furthermore, technological skills are vital for training. Employees with adequate proficiency can fully leverage learning programs and apply them effectively (Kalluri, 2023). Organizations that invest in developing technological skills help ensure that their employees remain competent, confident, and responsive to evolving digital demands (Reye s -Mercado et al., 2023).

Self-directed learning refers to an employee's capability and willingness to independently identify what needs to be learned, acquire new knowledge, and apply skills for improving their performance at work (Huy & Tam, 2025). With the current work environment, employees can no longer solely rely on structured training initiatives. Instead, ongoing self-directed learning is crucial for keeping up with technological advancements and changing organizational requirements. Research has found that personnel engaged in self-directed learning are more flexible, resilient, and competent at incorporating innovative tools and procedures into their work tasks (Nawaz & Mo'in, 2025). For credit cooperatives, such an approach to learning is important for staff members to independently acquire competence in new banking software, examine financial regulations, or implement effective strategies for digital member services. Moreover, several studies have shown that employees who consistently engage in self-directed learning demonstrate greater technological preparedness and higher work output (Nkem, 2024). Enterprises that encourage self-directed learning through access to online educational resources, mentorship opportunities, or knowledge exchange platforms can secure more proactive and adequately equipped employees to manage technological changes.

Motivation within the context of technological readiness refers to the factors that motivate employees to effectively embrace and utilize technology (Rane et al., 2024). Motivated employees tend to be more willing to participate in training programs, examine new systems, and implement acquired skills at work. There is evidence that motivation significantly influences technology adoption and job performance (Jais et al., 2024). Among personnel working in credit cooperatives, motivated workers show a higher involvement in digital banking transactions, compliance with organizational guidelines, and commitment to providing outstanding member service (Mollah, 2024). Motivation interacts with other elements of technological readiness; even individuals having appropriate equipment and sound skills may not achieve optimal performance if they lack motivation to effectively utilize their resources (Daoud & Kammon, 2024). Organizations fostering a motivated culture through incentives, rewards, and supportive environments empower employees to fully leverage their technological readiness, thereby enhancing cooperative performance (Soomro et al., 2025).

Training and Development

Training programs in general are created to provide skills enhancement and knowledge development. These programs aim to improve job performance as well as overall organizational outcomes (Bristol-Alagbariya et al., 2022). In terms of credit cooperatives, such programs play an important role because employees handle financial transactions, member services, and operational reporting. All of these activities demand preciseness, technical skills, and adaptability. Apart from specific job skills, such programs help employees develop critical thinking, problem-solving, and effective decision-making skills that are important in a changing financial environment (Jara dat et al., 2025). Effectively conducted training ensures that employees are prepared for the constantly changing demands of the cooperative, especially because of the introduction of digital operations and service delivery (Ahmed et al., 2025). As online banking, digital record keeping, and automated reporting systems become common practice, employees must continuously update their skills to ensure that quality services and operational efficiency is maintained (Anh et al., 2024). Further, training initiatives promote technological readiness. Employees gain confidence using new software and equipment, thereby improving their productivity and accuracy. Training and development used four (4) dimensions, namely: training needs assessment, program design, effectiveness and development implementation.

Training needs assessment (TNA) is a systematic approach aimed at identifying the deficits in employee skills, knowledge, and abilities to help determine appropriate training programs (Adikoeswanto et al., 2022). In credit cooperatives, the TNA ensures that employee training directly contributes to organizational goals, technological requirements, and benchmarks of service quality. Conducting the TNA allows cooperative leaders to identify areas requiring development, such as digital banking platforms, member, interaction strategies, and financial reporting protocols. Current research shows that tailored training programs improve employees' productivity and reduce operational errors (Ahli et al., 2024). For instance, within financial institutions, TNAs have shown that they influence the effectiveness and adoption of training initiatives by ensuring employees do not engage in content which does not improve their performance (Naveed et al., 2022). Additionally, TNAs foster employee involvement since staff members understand that the organization values their development through investing in appropriate skills (Felemban et al., 2024). Moreover, TNAs play an important role in credit cooperatives, where finances are limited. It ensures that training investments result in noticeable improvements in work outcomes without wastage. TNA also plays an essential role in the design of technology-based training programs. In the case of staff members that operate cooperative administration software and digital services provided

to their members, TNA highlights any deficiencies in knowledge and technological constraints, leading to the development of targeted training modules (Alí et al., 2022). Without conducting TNA, training may become generic and ineffective, thus negatively impacting employee confidence and technological readiness. Additional research shows that organizations regularly conducting TNA experience greater acceptance of new technologies and more proficient workforce (McNamara et al., 2024).

Program design refers to systematic planning of training goals, methods, content, and materials in order to achieve desirable learning outcomes (Sethi et al., 2023). When it comes to credit cooperatives, such a process includes customization of training, including workshops, online modules, on-the-job instructions, in accordance with employees' roles and responsibilities. This ensures alignment with both operational needs and technological requirements of the cooperative. Research demonstrates that a well-designed program improves employees' performance, promotes knowledge retention, and increases engagement (Уанамала, 2024). In a financial context, training programs based on hands-on practice, simulations, and scenario-based learning have proven particularly effective in increasing transaction accuracy and operational efficiency (Ho et al., 2025). To design a training program for credit cooperative employees, one has to take into account not only the complexity of financial tasks but also varied technological skills among staff members. Such an approach ensures inclusivity and relevance. In addition, program design should involve assessment tools, feedback loops, and follow-up sessions as they improve learning outcomes and contribute to transferring skills to actual workplace performance (Lim, 2025). Studies have also emphasized the importance of contextual relevance. Training designed to reflect real cooperative situations (e.g., processing member loans or managing financial records) is more likely to result in employee competence and confidence (Yap et al., 2023). Therefore, an effective program design contributes directly to technological readiness and overall work performance in cooperatives.

Training effectiveness is concerned with how well educational programs achieve their specific learning and performance goals (Rahmat et al., 2022). In credit cooperatives, this training effectiveness can be evaluated based on improvements in task precision, decreased financial transaction errors, increased adoption of digital tools, and enhanced member service quality. Recent studies suggest that successful training programs are positively associated with improved work performance and employee satisfaction (Jeréz-Jeréz et al., 2025). For example, research conducted in rural financial institutions indicates that staff members enrolled in customized training programs completed tasks faster and adhered more to operational guidelines compared to employees undergoing standard training (Kim et al., 2023). Effectiveness is not only limited to learning the skills but encompasses the continued application of training outcomes in workplace practices. Key determinants of effectiveness include the relevance of the training content, modes of delivery, participant engagement, and managerial support (Nathani, 2023). In credit cooperatives, training programs that combine theoretical knowledge with practical exercises – such as digital transaction simulations or case studies on member interactions – typically result in higher proficiency levels (Ting et al., 2024). Strong monitoring and evaluation processes, including feedback surveys, assessments, and performance metrics, are necessary for determining whether training was effective in translating into performance improvements.

Implementation of development programs is the process of integrating training initiatives into the operational activities of organizations. The objective is not only to ensure that employees undergo training but also to actively utilize the skills acquired (Halim et al., 2023). Specifically for credit cooperatives, it means scheduling training, allocating vital resources, monitoring participation, and ensuring that the training directly aligns with daily operational needs. Empirical evidence suggests that implementation

plays a crucial role in translating training efforts into improved performance outcomes (Qureshi et al., 2023). Cooperatives that implement developmental programs effectively often report higher rates of technology adoption, decreased operational errors, and improved service quality for their members (Ferreira, 2022). Also, this process requires continuous support through follow-up coaching and easily available learning resources that altogether emphasize the application of new skills in the workplace (Kotiekor Baidoo & Nwagwu, 2024). Additionally, organizational cultural environment is a critical factor that affects the effectiveness of development implementation. Literature indicates that employees have a higher tendency to use learned skills when the cooperative creates a supportive atmosphere, encourages an experimental approach, and officially recognizes the use of these competencies (Trivedi et al., 2024). In regard to credit cooperatives, effective development implementation is important for optimizing operational efficiency, improving readiness for technological advancements, and boosting overall workforce performance.

Work Performance

Employee performance refers to the extent to which employees effectively accomplish their assigned tasks and contribute toward organizational objectives (Thheeby et al., 2023). In credit cooperatives, good employee performance is important because staff members have a direct influence on service quality, financial transactions' accuracy, and operational efficiency within an organization. Good performing employees ensure that loans are processed promptly, records are kept accurately, and members receive responsive assistance. The collective effort increases the reputation and stability of the cooperative (Yanamala, 2022). Work performance is complex, involving different factors such as technical skills, interpersonal abilities, adherence to rules, adaptability, and proactive behaviors. Scholars have indicated that work performance can be influenced not only by an individual's capabilities but also by organizational support, technological readiness, and involvement in training programs (Mohd Faisal et al., 2022). In cooperative settings, where there are limited resources and members are prioritized, maintaining high levels of employee performance becomes crucial in preventing operational mistakes, minimizing delays in services, and maintaining member trust (Mustaqim et al., 2024). The work performance is measured based on the following dimensions: task performance, contextual performance and counterproductive work behavior.

Task performance is defined as the essential tasks that employees are officially expected to carry out as part of their job (Khin & Hung Kee, 2022). For credit cooperatives, such tasks include handling member accounts, processing loan applications, maintaining precise financial records, and adhering to regulatory and operational guidelines. Effective task performance is critical for efficient operations as mistakes in such basic activities directly affect member satisfaction and credibility (Bag et al., 2023). According to recent research, both training programs and technological readiness positively influence task performance among employees (Mukherjee et al., 2024). Employees who have access to dependable equipment, up-to-date software, and well-structured training are more capable of accomplishing tasks efficiently and accurately (Carvalho et al., 2023). In cooperatives, that implement digital transaction systems, employees who underwent structured training and technological preparation made fewer errors and processed transactions more quickly (Aini et al., 2025). Additionally, the task performance increases if employees receive clear instructions, explicit role guidance, and continuous feedback, all enabled by the cooperative management structure (Al-Shammari et al., 2024). Task performance is also associated with motivation; when employees are acknowledged and appreciate their efforts, they tend to maintain accuracy and

consistency (Bhatt & Shah, 2023). Since member satisfaction plays a vital role in cooperatives, successful task performance contributes to smooth operations and member trust, resulting in organizational success. Contextual performance refers to activities that serve the interests of an organization as a whole even though such activities do not belong to official job duties (Kim & Kim, 2022). Such activities include cooperation with colleagues, proactive problem-solving, volunteering for additional assignments, and assisting in the creation of a positive work environment. In credit cooperatives, contextual performance may take the form of assistance in completing tasks related to transaction processing or advice on using digital tools. Research shows that contextual performance increases organizational efficiency by encouraging teamwork, improving employee morale, and promoting knowledge exchange (Adula et al., 2023). Employees who engage in such behaviors help streamline work processes and create a workplace environment where common goals are valued (Rahardja et al., 2023). Additionally, an employee's comfort with technology plays an important role. Employees proficient with digital technologies are more likely to assist their colleagues in adapting to new systems and resolving technological issues (Dhankar & Singh, 2023).

Within cooperative settings, contextual performance helps enhance the quality of services offered to members. Staff members who exceed their official responsibilities in assisting members, providing immediate information, and participating in team problem-solving activities help create a culture of high standards, which improves the standing of the cooperative (Gachui, 2022). Moreover, training programs centered on teamwork, communication, and adaptable skills positively affect such contextual behaviors, revealing the link between staff development and improved employee performance (Jais & Ngah, 2024).

Counterproductive work behaviors (CWB) refer to the deliberate actions by employees that hinder organizational effectiveness or negatively affect the working environment (Alexandro et al., 2025). Among credit cooperatives, CWBs may include neglecting duties, providing incorrect information to members, abusing digital platforms, or demonstrating uncooperative behavior towards colleagues. These actions may reduce efficiency, jeopardize service quality, and erode member confidence. Research shows that CWB negatively correlates with variables such as training development, technological preparedness, and employee engagement (Eusufzai, 2023). Individuals who lack adequate training or encounter challenges while using technological tools tend to be more susceptible to frustration, errors, and actions subsequently labeled counterproductive (Bhuiyan, 2024). On the other hand, cooperatives that provide structured training, reliable equipment, and supportive supervision can significantly reduce instances of CWBs and promote compliance with organizational standards (Ng et al., 2022). Research indicates that workers who receive support and feel proficient in their positions will be less likely to engage in actions that can negatively impact organizational objectives (Lecтari et al., 2024). Hence, effective management and mitigation of CWBs are crucial for sustaining high performance and member satisfaction within credit cooperatives.

Correlation between Measures

The readiness of employees with regard to technology affects their performance by determining how fast and accurately they complete tasks utilizing digital tools. Employees that exhibit technological readiness showcase confidence when using digital applications such as cooperative management software, digital financial transaction systems, and online communication platforms. As a result, their performance improves alongside a reduction in errors (Hussain et al., 2022; Abd-o-Salloum & Al-Mousawi, 2025). In addition, research has shown that technologically ready employees not only perform better but adapt well to digital environments where they quickly learn new systems and solve problems effectively (Kulkarni

et al., 2024; Rahim et al., 2022). The technological readiness is important in credit cooperatives because employees frequently use online banking systems, digital record keeping systems, and automated reporting tools. This point is supported by several studies that found that credit cooperative employees with high technological readiness process member requests 35% faster and make fewer mistakes than those with low technological readiness levels (Ogbodookum et al., 2022; Tunmibi, 2024). Moreover, high technological readiness positively impacts "contextual performance" as employees become more willing to help colleagues with technical problems, share knowledge, and actively contribute to the development of cooperative processes (Hossain et al., 2025; Khayyum et al., 2025). Motivation and self-directed learning are other important factors in technological readiness that affect performance. The employees who have intrinsic motivation to apply technology and are proactive in learning new systems exhibit increased productivity and efficiency (Karim, 2025; Hunja, 2024). This is supported by studies indicating that cooperative staff who possess high levels of technological readiness are more accurate in task completion and contribute positively to organizational goals such as member satisfaction and quality of service (De Larmelin et al., 2025; Otache et al., 2023). Overall, technological readiness serves as a platform for employees to work efficiently, adapt to digital changes, and contribute to the sustainable development of credit cooperatives. Research studies have found that there is a strong correlation between technological readiness and organizational success factors such as productivity, quality of services, and operational efficiency (Mwita, 2024). Organizations whose staff members demonstrate technological readiness experience smoother digital change, more confidence among employees, and better adaptation to new financial technologies (Kadiyono & Ashriyana Sulistiobudi, 2024). In cooperative environments, where resources may be scarce, employees' technological readiness determines how technology can improve service delivery and operational effectiveness.

Theoretical Framework

This study is based on Human Capital Theory, first presented by Becker (1993), which posits that the knowledge, skills, abilities, and experience of employees act as valuable resources that increase productivity and success in an organization. According to this theory, investment in human capital, such as through education, training, and professional development, enables employees to be more productive, adopt new technologies, and support organizational goals (Becker, 1993). In credit cooperatives, human capital is evident in employees' ability to manage member accounts, process loans accurately, use financial tools digitally, and provide high-quality services. Research has proven that cooperative employees who participate in training programs develop skills that enhance their performance and enable them to make valuable contributions to the organization (Mweu & Mose, 2024). According to the theory, continuous updating of employee skills through training and development increases productivity as well as the ability to adopt new technologies, which are very essential to modern cooperatives whose operations depend on digital systems (Mwita, 2024). Human Capital Theory further elaborates that the value of skills possessed by employees improves over time through experience, practice, and learning (Becker, 1993). For credit cooperative employees, repetitive involvement with tasks and training increases their proficiency in financial software applications, digital transactions, and service procedures, thus improving their work performance. The research studies suggest that organizations that strategically invest in employee training experience notable improvements in productivity, efficiency, and service quality (Kadiono & Ashriyanasulistibudi, 2024). Further, employees who receive role-specific training often demonstrate increased confidence and motivation, thus leading to their greater engagement and willingness to cooperate in attaining cooperative goals (Wahyuningtas et al., 2023). The ability of employees to use

technology effectively is particularly important for cooperative workers since it helps them operate digital systems and enhances operational efficiency (Koech & Gatobu, 2024). According to Goal-Setting Theory by Locke and Latham (1990), employee performance is determined by goal clarity, goal challenge, and commitment to the goals set. The theory states that clear and challenging goals positively impact motivation, focus, and persistence, leading to better performance compared to vague and easy goals (Locke & Latham, 1990). In credit cooperatives, employees regularly perform complicated financial activities, member interactions, and processes that require high accuracy and efficiency. With clearly defined performance goals, leaders of such cooperatives can direct their employees towards key priorities, increase accountability, and enhance their commitment to organizational objectives (Kirchirchir, 2024). Research shows that goal-setting not only improves task performance but also encourages helpful behaviors such as teamwork, problem-solving and initiative – all of which are critical for efficient cooperative functioning (Farrukh Shahzad et al., 2025). Goal-Setting Theory emphasizes the importance of aligning individual goals with organizational objectives as well. In cooperatives, employees' performance goals need to facilitate broader objectives like service quality improvement, financial accuracy, and member engagement (Kulkarni et al., 2024). Misalignment between personal and organizational goals results in decreased motivation, emergence of counterproductive behavior, and poor performance. However, with proper goal alignment and training as well as technology readiness, employees demonstrate greater commitment, consistent performance, and flexibility to face new challenges (Azhra et al., 2025).

Conceptual Framework

As depicted in Figure 1, two independent variables and one dependent variable were examined in this study. The first independent variable can be referred to as technological readiness of employees. This variable is made up of four important components: equipment capacity, technology skills, self-directed learning and motivation. This represents the capacity and willingness of employees to use technology effectively in their job roles, along with their proactive approach to learning and adapting to new digital tools and systems. The second independent variable was training and development. This variable includes all aspects of employee training programs including assessment of needs, design of training program, implementation and evaluation of program results. Training and development act as an essential mechanism for equipping cooperative employees with the competencies required to achieve organizational goals, optimize operational performance, and adapt to evolving workplace requirements. Effectively designed programs ensure that employees gain both technical expertise and essential interpersonal skills, which are vital for delivering quality service and sustaining cooperative standards. The dependent variable of this study is employee performance, which reflects an outcome influenced by technological readiness and training development. This variable indicates how efficiently employees perform their job responsibilities and contribute towards organizational goals. Employee performance comprises three dimensions: Task performance: This refers to the efficiency and quality with which employees complete their job tasks. Contextual performance: It encompasses behaviors that benefit the overall organizational environment, including assisting co-workers, exhibiting initiative, and creating a positive work culture. Counterproductive work behavior: This refers to negative actions that prevent the organization from being effective, such as negligence, mistakes, or disruptive behaviors.

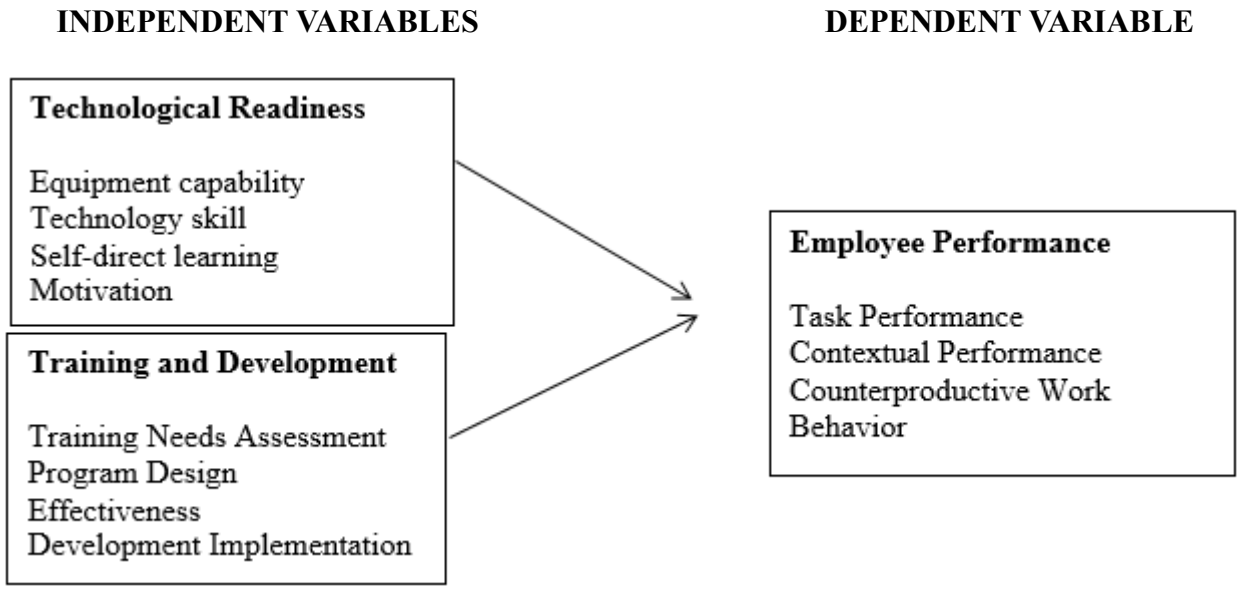

Figure 1. Schematic Diagram of the Study

3. METHODOLOGY

Quantitative research design and multiple regression analysis were utilized in this study to determine the influence of technological readiness and training development on work performance. To generate accurate results, the survey questionnaire was constructed on a 4-point Likert scale rating, underwent validation from experts and was subjected to reliability test called Cronbach Alpha. Further, in order to fully understand each question statement, the adapted instruments from various studies were contextualized to fit in with the credit cooperative personnel's organizational setup. The study was conducted in the District 2 of Davao Oriental namely; City of Mati, Lupon, and San Isidro. The study used a universal or total population sampling method. The respondents were all employees of credit cooperative firms with a minimum of six months employment with their cooperatives registered under the Cooperative Development Authority (CDA). The data obtained were carefully analyzed based on the objectives of the study. Mean and Regression analysis were used to measure the level and significant influence, respectively.

To safeguard participants' privacy and ensure their well-being, the researcher obtained written informed consent from each individual. The researcher implemented stringent security measures for all personal information collected. The researcher carefully assessed and managed all potential risks, especially those related to health, and took necessary steps to minimize or eliminate them. The safety and welfare of the participants were the top priority of the researcher. All sources were properly cited, providing appropriate attribution for any borrowed material. The research was conducted with unshakable honesty and profound respect for intellectual property rights. To ensure the credibility of findings, the researcher verified that all data and results had been accurately obtained and reported, free of any falsified facts.

4. RESULTS AND DISCUSSIONS

4.1 Level of Technological Readiness of Employees among Credit Cooperatives

As evident from Table 1, the level of technological readiness among the employees of credit cooperatives is extremely high since their mean score was 3.59 (SD=0.37). It means that they have the capability and

motivation to adopt new technologies within the workplace context. Out of the five dimensions of technological readiness, Motivation achieved the highest mean score (M=3.68), which means that they have highly positive attitudes towards technology and were highly motivated to make any changes brought about by the adoption of technology. They believe that technology adds value to their job experience, and they are willing to do more to acquire technological knowledge. Self-directed learning comes second with a mean score of 3.62, which suggests that they personally engage in enhancing their technological skills through learning on their own. This was evident from the proactive nature of the employees regarding their readiness to adapt continuously through learning. Technological skill also recorded an extremely high average rating of 3.59, meaning that the employees are quite certain about their ability to use computer software, learn technology, and leverage digital technology for improved performance in their work. On the other hand, equipment capability received the lowest average among the measures at 3.47, which was again considered extremely high, indicating that the employees were quite confident about the availability of technology and equipment to perform their duties. It is evident from the results that the employees are adequately prepared in terms of technology and digital tools.

Table 1
Level of Technological Readiness of Employees among Credit Cooperatives

Descriptive Indicator	Mean	SD	Level
Equipment Capability	3.47	0.48	Very High
Technology Skill	3.59	0.44	Very High
Self-Directed Learning	3.62	0.41	Very High
Motivation	3.68	0.42	Very High
Overall	**3.59**	**0.37**	**Very High**

Legend: 3.26 – 4.00-Very High; 2.51 – 3.25-High; 1.76 – 2.50-Low; 1.00 – 1.75-Very Low

These results indicate that credit cooperatives have been evolving into technologically adaptable institutions, able to cope with the needs of digitalization. The extremely high level of technological readiness was attributed to the required competences, motivation, and learning orientation to maintain efficiency and effective operations in an organization operating in a technology-intensive environment. Motivated and technology-oriented workers will be more efficient and productive, adaptive to change, innovative and contribute to better organizational outcomes and performance. Besides, the high degree of self-directed learning suggests that workers are ready to update their knowledge and skills despite the lack of training programs, which can enhance organizational effectiveness and sustainable development in the future. While the result for equipment capability is at the lowest mean, it means that cooperatives provide enough technological assistance to ensure effective employee operations.

These results are consistent with the findings by Aini et al. (2025) who argued that technological readiness is an important factor that greatly affects the behavioral intentions of people as well as their intentions to accept and utilize the technologies that have been introduced into an organization. This is also supported by the research by Anh et al. (2024) whose results show that highly technologically ready individuals are much more likely to be accepting and using artificial intelligence and other types of digital technology at work. According to Rahardja et al. (2023), technological readiness improves the adoption and use of technology by employees. Kadiyono and Sulistiobudi (2024) mentioned that both technological readiness and self-efficacy make a positive contribution towards organizational performance and financial performance because these concepts motivate the employees to adopt technology. Felemban et al. (2024) mentioned that technological readiness of an organization heavily depends upon the motivation level of employees, technological skills of employees, and their attitude towards change. Additionally, Khin and Hung Kee (2022) stated that technological readiness acts as one of the key factors to prepare organizations for Industry 4.0 and digital transformation strategies. Trivedi et al. (2024) also observed that digital readiness has a significant relationship with job satisfaction of employees and technology-based work system participation. Furthermore, according to Tunmibi (2024), digital literacy was found to predict the motivation of workers to make use of AI technologies. The above-mentioned researches have justified the results of the current study since employees who are technologically ready find it easier to adapt to changes in digital technology and enhance organizational performance.

4.2 Level of Training Development of Employees among Credit Cooperatives

Table 2 presents the development of training within credit cooperatives in Davao Oriental, which has a very high mean score of 3.51 (SD=0.40). This means that, on the whole, employees view the effectiveness of training programs within the cooperative very favorably. Of the various indicators, Effectiveness scored the highest mean score of 3.61, implying that training activities have greatly improved the efficiency and competence of employees within the workplace. Training transfer is likewise high among employees, meaning that they can make use of their training in accomplishing work effectively. Training needs assessment and development implementation have both scored very high mean scores of 3.51 and 3.50 respectively, implying that training programs have been very successful in addressing the job-related needs and skill gaps of employees. These implied that credit cooperatives were conscious about the need to assess the development requirements of their employees and to see to it that the benefits of training were incorporated into their operations. But program design had the lowest mean rating (M=3.44), albeit very high, which indicates that although the materials and format of training programs have been good, more improvements can still be made.

Table 2

Level of Training Development of Employees among Credit Cooperatives

Indicator	Mean	SD	Descriptive Level
Training Needs Assessment	3.51	0.42	Very High
Program Design	3.44	0.46	Very High
Effectiveness	3.61	0.46	Very High

Development Implementation	3.50	0.47	Very High
Overall	**3.51**	**0.40**	**Very High**

Legend: 3.26 – 4.00-Very High; 2.51 – 3.25-High; 1.76 – 2.50-Low; 1.00 – 1.75-Very Low

The results indicated that there was an effective adoption of training development processes by the credit cooperatives that enhance the competencies of the employees and the organizational performance. This high perception on the effectiveness is because training contributes to enhanced productivity, increased confidence, and professional skills of the employees. In the case where the employees have been adequately trained and can effectively utilize the knowledge in their work, then there will be improvement in service delivery and efficiency in the organization. Additionally, the high existence of training needs assessments shows that there is awareness of the development needs of the employees.

Findings can also be validated by the research work done by Mwita (2024), who noted that training in saving and credit cooperative societies has a very positive impact on the performance of the employees and their contribution to organizational success. The effectiveness of training has been shown to have a significant impact on financial and operational performance in cooperative organizations according to Oliveira et al. (2024). Bristol-Alagbariya et al. (2022) further mentioned that performance management and training contribute positively to organizational productivity through improving competency and efficiency of employees. Furthermore, Ting et al. (2024) elaborated on the fact that proper training transfer positively affects the organizational citizenship behavior and overall performance in contemporary work settings. Similarly, Dhankhar & Singh (2023) pointed out that systematic training along with the use of HR analytics in developing development programs ensures enhanced adaptability and career growth for employees. In addition to this, Sethi et al. (2023) also highlighted the fact that organizational support, along with readiness for change, is an important factor that can help make training programs and job performance outcomes more effective.

4.3 Level of Work Performance of employees among Credit Cooperatives

According to Table 3, the employees within the credit cooperatives recorded very high performance at work, with a total mean score of 3.58 (SD=0.38). This suggests that employees have the capability to efficiently complete tasks, exhibit positive behavior in the workplace, and maintain excellent interpersonal relationships. On the other hand, among all the performance dimensions, counterproductive work behavior had the highest score, which was recorded at 3.63, implying that employees conduct themselves in a responsible manner and are emotionally well controlled. The contextual performance was close at second place with a mean score of 3.61, showing the ability of employees to assist other employees in the organization, engage in group efforts, and perform duties outside their designated duties. This is an indication of organizational citizenship behavior, which entails the contribution of employees towards ensuring a conducive working environment. The third aspect was task performance with a mean score of 3.51, meaning that employees are capable of performing assigned tasks and meeting organizational expectations with satisfactory outputs. In summary, results indicate balanced employee performance on organizational tasks and teamwork.

Table 3
Level of Work Performance of employees among Credit Cooperatives

Indicator	Mean	SD	Descriptive Level
Task Performance	3.51	0.44	Very High
Contextual Performance	3.61	0.42	Very High
Counterproductive Work Behavior	3.63	0.41	Very High
Overall	3.58	0.38	Very High

Legend: 3.26 – 4.00-Very High; 2.51 – 3.25-High; 1.76 – 2.50-Low; 1.00 – 1.75-Very Low

These findings indicated that there was a very efficient workforce in terms of doing its duties that, apart from being efficient at doing its assigned tasks, is cooperative and exhibits sound behavior in the place of work. High levels of context-related performance mean that employees are contributing in terms of doing things above their job descriptions; this brings a lot of cohesion within the team and in the place of work. High scores in counterproductive work behavior mean that employees have the capacity to regulate their own behavior, thus avoiding workplace conflicts and inefficiencies.

These results are supported by the work done by Mustaqim et al. (2024) who discovered that employee engagement and goal orientation considerably help boost the performance of employees and their competence at work. In a similar vein, Ting et al. (2024) highlighted that the psychological capital and efficient training transfer contribute to the enhancement of organizational citizenship behavior which is in line with high contextual performance in this study. Lastly, Lestari et al. (2024) found that self-efficacy and work discipline are important indicators of the performance of employees. Moreover, Naveed et al. (2022) emphasized that information literacy and lifelong learning can have a positive effect on performance at work, as capable and properly trained employees would be able to work effectively. Similarly, Yanamala (2022) indicated that well-designed systems of performance assessment and feedback can lead to better employee performance and lower counterproductive outcomes. Also, Gachui (2022) emphasized that performance of the employees in organizational settings largely depends on their behavioral discipline, teamwork, and compliance with organizational norms. Thus, these studies confirm the current results, as trained, motivated, and disciplined employees would demonstrate high task performance and contextual behaviors.

4.4 Analysis on the Influence of Technological Readiness and Training Development on Work Performance among Credit Cooperatives

The Table 4 below shows the result of the regression analysis on technological readiness and training development program and its effect on work performance in credit cooperatives. The model is highly significant ($F = 72.9$, $p < .001$) meaning that together, the predictors contribute significantly to the variations in employee performance. The correlation coefficient of .775 indicates that there is a high degree of association between the predictors and employee performance while R^2 of .601 means that 60.1% of the variation in employee performance can be attributed to technological readiness and training development program.

Table 4.4
Analysis on the Influence of Technological Readiness and Training Development on Work Performance among Credit Cooperatives

Predictor	Estimate	SE	t	p
Intercept	0.756	0.2422	3.12	0.002
Technological Readiness of Employees	0.283	0.1009	2.8	0.006
Training Development Program	0.516	0.0943	5.47	<.001
R=.775; R^2=.601; F=72.9; p<.001				

Both variables were found to be statistically significant predictors of employee performance. The impact of technology readiness (β = 0.283, p = .006) is found to be significant because those who are ready technologically are likely to perform well on their job tasks, teamwork, and performance at work. Nevertheless, the variable of training development program (β = 0.516, p < .001) has been identified as an even more influential predictor of employee performance than technology readiness. Based on the findings, enhancing the level of technological readiness and development of training programs will improve the efficiency of employees working in the credit cooperatives. Nevertheless, more importance should be given to development of training systems since they play a significant role in determining employee performance. It is important for organizations to develop effective training programs at the same time equipping their employees with the necessary technological capabilities.

The results of this research are in harmony with the work of Mwita (2024) that showed that training plays a crucial role in enhancing the performance of employees and effectiveness of organizations through cooperation. Likewise, Oliveira et al. (2024) discovered that there is an evident influence of training programs on organizational efficiency and financial success. Khin and Hung Kee (2022) pointed to technological readiness as one of the determinants of organizational performance. In addition, it is evident from the research by Aini et al. (2025) and Carvalho et al. (2023) that technology readiness and digital competency have a substantial impact on the employee's performance and creativity. Furthermore, Sethi et al. (2023) observed that training and support systems in an organization have a significant impact on employee productivity. Overall, the findings provided above indicate that technology readiness and training development have critical impacts on employee performance, where training development plays a dominant role.

5. CONCLUSION

According to the findings of the study, credit cooperative workers had shown themselves to be very receptive towards using technology in their line of work. It can be seen that these workers displayed confidence and were willing to adapt to using technology in order to become more efficient in carrying out their duties. Moreover, training programs provided by the credit cooperatives are perceived to be quite beneficial for the employees. Moreover, employees exhibited high levels of performance with respect to performing their tasks, collaborating with other individuals, and showing responsible behavior at work. In addition, findings from this research revealed that the two elements, i.e., technology readiness and training development, influenced employee performance in positive ways. However, training development had a greater effect on performance, stressing the significance of training programs for improving performance in credit unions.

6. RECOMMENDATION

Credit unions are advised to focus on developing the capacity of their workforces to meet the requirements of the mid-career and seasoned workers as well as the new recruits to ensure continued high performances and high engagement. It is important for cooperatives to improve their technology infrastructure and conduct constant training sessions for ensuring that their workers remain technologically ready. Managers need to design and organize training sessions in a manner that ensures they are interactive and geared towards future job demands. Given the importance of technological readiness and training development as factors that affect performance, cooperatives should make it a point to invest in both as key strategies in making improvements within their organizations. Researchers interested in conducting future studies on this topic are advised to consider other environments apart from cooperatives where such an analysis can be conducted.

REFERENCES

1. Abdo-Salloum, A. M., & Al-Mousawi, H. Y. (2025). Accounting students' technology readiness, perceptions, and digital competence toward artificial intelligence adoption in accounting curricula. *Journal of Accounting Education*, *70*, 100951.
2. Adikoeswanto, D., Eliyana, A., Syamsudin, N., Budiyanto, S., Arief, Z., & Anwar, A. (2022). The mediation role of adoption readiness on perceived anxiety and attitude toward using database management system at correctional institutions. *Heliyon*, *8*(8).
3. Adula, M., Birbirsa, Z. A., & Kant, S. (2023). The effect of interpersonal, problem solving and technical training skills on performance of Ethiopia textile industry: Continuance, normative and affective commitment as mediators. *Cogent business & management*, *10*(3), 2286672.
4. Ahli, R., Hilmi, M. F., & Abudaqa, A. (2024). The influence of leadership dynamics and workplace stress on employee performance in the entrepreneurial sector and the moderating role of organizational support. *Aptisi Transactions on Technopreneurship (ATT)*, *6*(3), 300-313.
5. Ahmed, S., Ashrafi, D. M., Ahmed, R., Ahmed, E., & Azim, M. (2025). How employee engagement mediates the training and development and work–life balance towards job performance of the private banks?. *The TQM Journal*, *37*(7), 2015-2040
6. Aini, Q., Manongga, D., Rahardja, U., Sembiring, I., & Li, Y. M. (2025). Understanding behavioral intention to use of air quality monitoring solutions with emphasis on technology readiness. *International Journal of Human–Computer Interaction*, *41*(8), 5079-5099.
7. Alexandro, R. (2025). Strategic human resource management in the digital economy era: an empirical study of challenges and opportunities among MSMEs and startups in Indonesia. *Cogent Business & Management*, *12*(1), 2528436.
8. Ali, K., Johl, S. K., Muneer, A., Alwadain, A., & Ali, R. F. (2022). Soft and hard total quality management practices promote industry 4.0 readiness: a SEM-neural network approach. *Sustainability*, *14*(19), 11917.
9. Al-Shammari, M., Ahmed Al Bin Ali, F., Abdulla AlRashidi, M., & Salem Albuainain, M. (2024). Big data and predictive analytics for strategic human resource management: A systematic literature review. *International Journal of Computing and Digital Systems*, *17*(1), 1-9.
10. 10. Anh, N. T. M., Hoa, L. T. K., Thao, L. P., Nhi, D. A., Long, N. T., Truc, N. T., & NgocXuan, V. (2024). The effect of technology readiness on adopting artificial intelligence in accounting and auditing in Vietnam. *Journal of Risk and Financial Management*, *17*(1), 27.

11. Azhar, A., Rehman, N., Alyas, T., & Makki, B. I. (2025). AI adoption for green performance: An understanding of moderated mediation model. *International Journal of Hospitality Management*, *129*, 104191.
12. Bag, S., Rahman, M. S., Gupta, S., & Wood, L. C. (2023). Understanding and predicting The determinants of blockchain technology adoption and SMEs' performance. *The International Journal of Logistics Management*, *34*(6), 1781-1807.
13. Bhatt, M., & Shah, P. (2023). Acceptance of artificial intelligence in human resource practices by employees. In *The adoption and effect of ARtificial Intelligence on human resources management, part B* (pp. 13-30). Emerald Publishing Limited.
14. Bhuiyan, M. R. I. (2024). Industry readiness and adaptation of fourth industrial revolution: Applying the extended TOE framework. *Human Behavior and Emerging Technologies*, *2024*(1), 8830228.
15. Bristol-Alagbariya, B., Ayanponle, O. L., & Ogedengbe, D. E. (2022). Developing andimplementing advanced performance management systems for enhanced organizational productivity. *World Journal of Advanced Science and Technology*, *2*(1), 39-46.
16. Carvalho, L. P. D., Poleto, T., Ramos, C. C., Rodrigues, F. D. A., de Carvalho, V. D. H., & Nepomuceno, T. C. C. (2023). Predictors of digital competence of public university employees and the impact on innovative work behavior. *Administrative Sciences*, *13*(5), 131.
17. Daoud, Y., & Kammoun, A. (2024). Analyzing and forecasting e-commerce adoption drivers among SMEs: A machine learning approach. *Human Behavior and Emerging Technologies*, *2024*(1), 7747136.
18. Dhankhar, K., & Singh, A. (2023, August). Employees' adoption of HR analytics–a theoretical framework based on career construction theory. In *Evidence-based HRM: a Global Forum for Empirical Scholarship* (Vol. 11, No. 3, pp. 395-411). Emerald Publishing Limited.
19. de Larmelina, S., da Silva, A. L., & Risso, L. A. (2025). A technology readiness assessment approach for Digital Twin implementation in SMEs. *The International Journal of Advanced Manufacturing Technology*, *140*(5), 2777-2796.
20. Eusufzai, Z. (2023). IOT Integration In Intelligent Lubrication Systems For Predictive Maintenance And Performance Optimization In Advanced Manufacturing Industries. *Journal of Sustainable Development and Policy*, *2*(04), 140-173.
21. Farrukh Shahzad, M., Liu, H., & Zahid, H. (2025). Industry 4.0 technologies and sustainable performance: do green supply chain collaboration, circular economy practices, technological readiness and environmental dynamism matter?. *Journal of Manufacturing Technology Management*, *36*(1), 1-22.
22. Felemban, H., Sohail, M., & Ruikar, K. (2024). Exploring the readiness of organisations to adopt artificial intelligence. *Buildings*, *14*(8), 2460.
23. Ferreira, N. (2022). Career adaptability as a predictor of employees' career agility and career embeddedness. In *Managing Human Resources: The New Normal* (pp. 229-248).
24. Cham: Springer International Publishing.
25. Gachui, J. G. (2022). *Predictors of employee performance at the ministry of education in Kenya* (Doctoral dissertation, JKUAT-COHRED).
26. Halim, N. H. A. A., Azlan, M. A. M., Adzhar, M. N. A. N., & Hussein, N. (2023).

27. Accelerating digital talent readiness in Malaysian banking sector: A study on technology adoption through the intention to use customer-focused digital solutions. *Information Management and Business Review*, *15*(1), 164-175.
28. Ho, H., Han, S. M., Cha, J., & Pham, L. (2025). Mobile banking customer satisfaction and loyalty: The roles of technology readiness. *Journal of Risk and Financial Management*, *18*(7), 403.
29. Hossain, Q., Ikbal, M. Z., & Rahman, M. M. (2025). A meta data-driven decision support in human capital management: reviewing hris and predictive analytics integration. *ASRC Procedia: Global Perspectives in Science and Scholarship*, *1*(01), 215-246.
30. Hunja, G. B. (2024). *A Framework for Assessing Readiness in the Adoption of Digital Systems in the Operation of Savings and Credit Cooperative Societies in Tanzania: A Case of Dodoma City Council* (Master's thesis, University of Dodoma (Tanzania)).
31. Hussain, A., Akbar, M., Shahzad, A., Poulova, P., Akbar, A., & Hassan, R. (2022). E-commerce and SME performance: The moderating influence of entrepreneurial competencies. *Administrative Sciences*, *12*(1), 13.
32. Huy, N. Q., & Tam, P. T. (2025). Applied Data Science for Analyzing the Mediating Role of Digital Transformation Influencing Banking Business Efficiency in Vietnam. *Journal of Applied Data Sciences*, *6*(3), 2031-2045.
33. Jais, R., Ngah, A. H., Rahi, S., Rashid, A., Ahmad, S. Z., & Mokhlis, S. (2024). Chatbots adoption intention in public sector in Malaysia from the perspective of TOE framework. The moderated and mediation model. *Journal of Science and Technology Policy Management*.
34. Jais, R., & Ngah, A. H. (2024). The moderating role of government support in chatbot Adoption intentions among Malaysian government agencies. *Transforming Government: People, Process and Policy*, *18*(3), 417-433.
35. Jaradat, Z., AL-Hawamleh, A. M., & Altarawneh, M. (2025). Investigating the impact of technological orientation and innovation orientation on the sustainability and development the industrial sector. *Competitiveness Review: An International Business Journal*, *35*(2), 409-433.
36. Jerez-Jerez, M. J. (2025). A study of employee attitudes towards AI, its effect on Sustainable development goals and non-financial performance in independent hotels. *International Journal of Hospitality Management*, *124*, 103987.
37. Kadiyono, A. L., & Ashriyana Sulistiobudi, R. (2024). Linking psychological capital, technology readiness and entrepreneurial orientation to entrepreneurs' financial performance: a study of women MSMEs in Indonesia. *Cogent Business & Management*, *11*(1), 2413380.
38. Kalluri, K. (2023). Enhancing Credit Union Operations: Utilizing Pega's Workflow Automation for Member Management. *INTERANTIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*, *7*, 1-7.
39. Karim, M. R. (2025). Optimizing Maintenance Strategies in Smart Manufacturing: A Systematic Review Of Lean Practices, Total Productive Maintenance (TPM), And Digital Reliability. *Review of Applied Science and Technology*, *4*(02), 176-206.
40. Khayyam, M., Yushi, J., Liu, Q., Idrees, H., Qin, S., & Nurlegul, A. (2025). Leveraging technological readiness and knowledge sources for green innovation: a resource orchestration perspective. *Business Process Management Journal*, *31*(3), 848-877

41. Khin, S., & Hung Kee, D. M. (2022). Identifying the driving and moderating factors of Malaysian SMEs' readiness for Industry 4.0. *International Journal of Computer Integrated Manufacturing*, *35*(7), 761-779.
42. Kim, J., & Kim, E. (2022). Relationship between self-esteem and technological readiness: Mediation effect of readiness for change and moderated mediation effect of gender in South Korean teachers. *International journal of environmental research and public health*, *19*(14), 8463.
43. Kim, S., Chow, B. C., Park, S., & Liu, H. (2023). The usage of digital health technology among older adults in Hong Kong and the role of technology readiness and eHealth literacy: path analysis. *Journal of medical Internet research*, *25*(1), e41915.
44. Kipchirchir, H. (2024). *Credit Risk Management Practice, Technological Innovation and Financial Performance of Deposit-Taking Saccos in Kenya* (Doctoral dissertation, Cuk).
45. Koech, F. J., & Gatobu, P. (2024). LEADERSHIP STRATEGIES AND ORGANIZATIONAL PERFORMANCE OF SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN UASIN GISHU COUNTY, KENYA. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *8*(3).
46. Koteikor Baidoo, D., & Nwagwu, W. E. (2024). User and service provider assessment of technology readiness of library commons in selected universities in Ghana. *Library Management*, *45*(5), 331-361.
47. Kulkarni, A. V., Joseph, S., & Patil, K. P. (2024). Artificial intelligence technology readiness for social sustainability and business ethics: Evidence from MSMEs in developing nations. *International Journal of Information Management Data Insights*, *4*(2), 100250.
48. Lestari, S., Watini, S., & Rose, D. E. (2024). Impact of self-efficacy and work discipline on employee performance in sociopreneur initiatives. *Aptisi Transactions on Technopreneurship (ATT)*, *6*(2), 270-284.
49. Lim, J. L. (2025). The Role of Artificial Intelligence in Shaping the Future of Work, Learning, and Talent Management. *Computing and Interdisciplinary Science*, *1*(2), 8-14.
50. McNamara, A. J., Shirowzhan, S., & ME Sepasgozar, S. (2024). Investigating the determents of intelligent construction contract adoption: a refinement of the technology readiness index to inform an integrated technology acceptance model. *Construction Innovation*, *24*(3), 702-724.
51. Mohammad, A. A., Mohammad, S. I., Al-Oraini, B., Vasudevan, A., Hunitie, M. F. A., & Ismael, B. (2025). The impact of agricultural credit on farm productivity, employment, and rural development: Empirical evidence from Jordan's agricultural sector. *Pakistan Journal of Agricultural Research*, *38*(3), 20-31.
52. Mollah, M. H. O. R. (2024). Blockchain Adoption And Organizational Long-Term Growth In Small And Medium Enterprises (SMEs). *Review of Applied Science and Technology*, *3*(04), 128-51. Mweu, R. M., & Mose, T. (2024). INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) INTEGRATION AND PERFORMANCE OF SAVINGS & CREDIT CO-OPERATIVES (SACCOs) IN AGRICULTURE SECTOR IN KIAMBU COUNTY, KENYA. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *8*(3).
53. Mohd Faizal, S., Jaffar, N., & Mohd Nor, A. S. (2022). Integrate the adoption and readiness of digital technologies amongst accounting professionals towards the fourth industrial revolution. *Cogent Business & Management*, *9*(1), 2122160.
54. Mukherjee, S., Nagariya, R., Mathiyazhagan, K., Baral, M. M., Pavithra, M. R., & Appolloni, A. (2024). Artificial intelligence-based reverse logistics for improving circular economy performance: a

developing country perspective. *The International Journal of Logistics Management*, *35*(6), 1779-1806.

55. Mustaqim, H., Alhempi, R. R., Siregar, B. A., & Shaddiq, S. (2024). The relationship between employee engagement and goal orientation towards competence and employee performance. *Calitatea*, *25*(198), 211-221.
56. Mwita, K. M. M. (2024). The Impact of Training on Organisational Performance: Empirical Evidence from Savings and Credit Co-operative Societies (SACCOS) in Tanzania. *Journal of Co-operative and Business Studies (JCBS)*, *8*(1).
57. Naveed, M. A., Iqbal, J., Asghar, M. Z., Shaukat, R., & Seitamaa-Hakkarainen, P. (2022). Information literacy as a predictor of work performance: the mediating role of lifelong learning and creativity. *Behavioral Sciences*, *13*(1), 24.
58. Nawaz, A., & Moin, M. S. (2025). From Leadership to Brand Equity: The Mediating Roles of Virtuousness and Online Learning Readiness in Indonesian Higher Education. *International Journal of Digital Entrepreneurship and Business*, *6*(1), 62-81.
59. Ng, P. M., Lit, K. K., & Cheung, C. T. (2022). Remote work as a new normal? The technology-organization-environment (TOE) context. *Technology in Society*, *70*, 102022.
60. Nkem, L. (2024). *Impact of Technology Readiness and Acceptance on Employee Performance in Remote Work Environments* (Doctoral dissertation, The Chicago School of Professional Psychology).
61. Nyathani, R. (2023). AI in performance management: Redefining performance appraisals in the digital age. *Journal of Artificial Intelligence & Cloud Computing. SRC/JAICC- 146*, *134*, 2-5.
62. Ogbodoakum, N., Ayub, A. F. M., & Abiddin, N. Z. (2022). The Influence of Individual and Organizational Factors on Readiness to Accept Online Learning among Higher Education Lecturers in Nigeria. *Knowledge Management & E-Learning*, *14*(3), 304-328.
63. Oliveira, B. S. C., Weymer, A., Piccoli, P., & Ramos, S. C. (2024). The relationship between training effectiveness and financial performance in cooperative organizations. *Social Enterprise Journal*, *20*(3), 391-415.
64. Otache, I., Echukwu, I. J., Umar, K., Yunusa, A., & Audu, S. (2023). Internal factors affecting the performance of employee-based savings and credit cooperatives: evidence from Nigeria. *Journal of Enterprising Communities: People and Places in the Global Economy*, *17*(6), 1154-1170.
65. Qureshi, K. M., Mewada, B. G., Kaur, S., & Qureshi, M. R. N. M. (2023). Assessing lean 4.0 for industry 4.0 readiness using PLS-SEM towards sustainable manufacturing supply chain. *Sustainability*, *15*(5), 3950.
66. Rahardja, U., Hapsari, I. D., Putra, P. H., & Hidayanto, A. N. (2023). Technological readiness and its impact on mobile payment usage: A case study of go-pay. *Cogent Engineering*, *10*(1), 2171566.
67. Rahim, N. N. A., Humaidi, N., Aziz, S. R. A., & Zain, N. H. M. (2022). Moderating Effect of Technology Readiness towards Open and Distance Learning (ODL) Technology Acceptance during COVID-19 Pandemic. *Asian Journal of University Education*, *18*(2), 406-421.
68. Rahmat, T. E., Raza, S., Zahid, H., Abbas, J., Sobri, F. A. M., & Sidiki, S. N. (2022).
69. Nexus between integrating technology readiness 2.0 index and students'e-library services adoption amid the COVID-19 challenges: Implications based on the theory of planned behavior. *Journal of Education and Health Promotion*, *11*, 50.
70. Rane, N., Choudhary, S. P., & Rane, J. (2024). Acceptance of artificial intelligence technologies in business management, finance, and e-commerce: factors, challenges, and strategies. *Studies in Econo-*

mics and Business Relations, *5*(2), 23-44.

71. Reyes-Mercado, P., Barajas-Portas, K., Kasuma, J., Almonacid-Duran, M., & Zamacona-Aboumrad, G. A. (2023). Adoption of digital learning environments during the COVID-19 pandemic: merging technology readiness index and UTAUT model. *Journal of International Education in Business*, *16*(1), 91-114.
72. Sethi, D., Pereira, V., Chakraborty, T., & Arya, V. (2023). The impact of leader-member exchange, perceived organizational support, and readiness for change on job crafting behaviours in HRM in an emerging market. *The International Journal of Human Resource Management*, *34*(22), 4261-4290.
73. Soomro, R. B., Al-Rahmi, W. M., Dahri, N. A., Almuqren, L., Al-Mogren, A. S., & Aldaijy, A. (2025). A SEM–ANN analysis to examine impact of artificial intelligence technologies on sustainable performance of SMEs. *Scientific Reports*, *15*(1), 5438.
74. Theeb, K. A., Mansour, A. M. D., Khaled, A. S., Syed, A. A., & Saeed, A. M. (2023). The impact of information technology on retail industry: an empirical study. *International Journal of Procurement Management*, *16*(4), 549-568.
75. Ting, Q. H., Lew, T. Y., Goi, C. L., Sim, A. K., & Gim, G. C. (2024). Psychological capital and employee engagement as predictors of organisational citizenship behaviour in the industrial revolution 4.0 era: transfer of training as a mediator. *Current Psychology*, *43*(6), 5219-5242.
76. Trivedi, T., Vora, H., & Bhatt, V. (2024). Predicting the antecedents of digital readiness of teachers by examining the mediating role of job satisfaction. *International Journal of Innovation and Learning*, *35*(3), 312-337.
77. Tunmibi, S. (2024). Digital competence as predictor for the motivation to use artificial intelligence technologies among librarians in Edo and Delta States, Nigeria. *Journal of Technology Innovations and Energy*.
78. Wahyuningtyas, R., Disastra, G., & Rismayani, R. (2023). Toward cooperative competitiveness for community development in Economic Society 5.0. *Journal of Enterprising Communities: People and Places in the Global Economy*, *17*(3), 594-620.
79. Yanamala, K. K. R. (2022). Integrating machine learning and human feedback for employee performance evaluation. *Journal of Advanced Computing Systems*, *2*(1), 1-10.
80. Yanamala, K. K. R. (2024). Strategic implications of AI integration in workforce plan and talent forecasting. *Journal of Advanced Computing Systems*, *4*(1), 1-9.
81. Yap, J. B. H., Lee, K. P. H., Skitmore, M., Lew, Y. L., Lee, W. P., & Lester, D. (2023).
82. Predictors to increase safety technology adoption in construction: an exploratory factor analysis for Malaysia. *Journal of Civil Engineering and Management*, *29*(2), 157-17